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Eric A. Nelson

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EXAMINER

WINDER, PATRICE L

ART UNIT

PAPER NUMBER

2145

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/884,724

Applicant(s)

NELSON ET AL

Examiner

Patrice Winder

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claim 1 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 6, 2005.

### ***Claim Objections***

2. Claims 2, 6, 11 and 15, are objected to because of the following informalities: each contains an abbreviation that has not been previously defined. Appropriate correction is required.
3. Specifically, applicant's attention is drawn to the following abbreviations: FMS, FOQA, ACMS, SQL, ELS and CDL.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 12 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Lundberg et al., EP 0 890 907 A1 (hereafter referred to as Lundberg).
6. Regarding claim 12, Lundberg taught a method of providing data communication services (abstract), comprising:

establishing a radio communication path between a moving object and a ground station using a data communication server co-located with the moving object (column 4, lines 43-49), the data communications server including a plurality of interface units (proxy server 10 coupled to suitable local area network (LAN) interface, PSPDN interface, RF interface);

said step of establishing including:

sending a channel request signal to the ground station (column 3, lines 20-24, column 4, lines 35-40); and

receiving an acknowledgment signal back from the ground station indicating (column 3, lines 20-24, column 4, lines 43-49);

wherein said data communications server includes software architecture including software function layers, the layers including a system resources layer (caching service, column 3, lines 52-56), a system services layer (billing service, column 5, lines 1-10), an application programming interface layer (transferring messages between operating system and other layers), and an application layer (e-mail services, column 5, lines 11-19).

7. Regarding claim 16, Lundberg taught a method of providing data communication services (abstract), comprising:

a data communication server, co-located with the moving object, for establishing a radio communication path between a moving object and a ground station using (column 4, lines 43-49);

wherein said data communications server includes software architecture including software function layers, the layers including a system resources layer (caching service, column 3, lines 52-56), a system services layer (billing service, column 5, lines 1-10), an application programming interface layer (transferring messages between operating system and other layers), and an application layer (e-mail services, column 5, lines 11-19).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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10. Claims 2-3, 5-11, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of Nazem et al., USPN 5,983,227 (hereafter referred to as Nazem).

11. Regarding claim 2, Lundberg taught a method of providing data communication services (abstract), comprising:

establishing a radio communication path between a moving object and a ground station using a data communication server co-located with the moving object (column 4, lines 43-49), the data communications server including a plurality of interface units for accessing different data network including an Ethernet interface unit, an ISDN interface unit, and a predetermined wireless data network interface unit (proxy server 10 coupled to suitable local area network (LAN) interface, PSPDN interface, RF interface);

said step of establishing including:

sending a channel request signal, via the ISDN interface unit and communication unit, to the ground station (column 3, lines 20-24, column 4, lines 35-40); and

receiving an acknowledgment signal via the ISDN interface unit and the communication unit, including a channel assignment, back from the ground station indicating that a channel is being made available and being assigned for the radio communication path (column 3, lines 20-24, column 4, lines 43-49);

transmitting data to and receiving data from said ground station over said packet data network, said data including either of user information or moving object operation information 4, lines 35-53);

wherein said data communications server includes software architecture including software function layers, the layers including a system resources layer (caching service, column 3, lines 52-56), a system services layer (billing service, column 5, lines 1-10), an application programming interface layer (transferring messages between operating system and other layers), and an application layer (e-mail services, column 5, lines 11-19), and

wherein data structure for retrieving time sensitive information for a user (column 3, lines 52-56), a FMS data structure for data loading (downloading data, column 4, lines 25-34); and a FOQA data structure for obtaining and managing ACMS data (information about flight destination, column 4, lines 25-34); and

the system services layer including either of TCP/IP, data compression, cryptographic, scheduling, or transaction oriented services (billing transactions, column 5, lines 1-10). Lundberg does not specifically teach the application programming interface layer including components representable by objects for providing communication services with each object including a communicator, receptor, and service logic.

However, Nazem taught application programming interface layer including components representable by objects for providing communication services with each object including a communicator, receptor, and service logic (operating system sockets associated with HTTP connection, column 2, lines 58-66). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Nazem's application programming interface objects in Lundberg's web services

architecture would have reduced burdensome system design. The motivation would have been to take advantage of the features of existing messaging protocols, such as of HTTP (hypertext transport protocol), for client-server communication.

12. Regarding dependent claim 3, Nazem taught the time-sensitive information includes either sports scores, business information, news information, weather information, traffic information, politics information or financial information (column 4, lines 3-23).

13. Regarding dependent claim 5, Nazem taught the user information includes time-sensitive information (column 6, lines 56-59) that is obtained by:

permitting a user to request an update of the time-sensitive information using a graphical user interface, the time-sensitive information being stored in a user profile (column 3, lines 22-29);

reviewing the user profile containing the time sensitive information requested by the user to verify the status of the current time-sensitive information (column 3, lines 59-67; column 4, lines 1-2);

requesting an update of the time-sensitive information when the time-sensitive information is determined to be no longer current time-sensitive information (column 4, lines 3-23);

retrieving the updated time-sensitive information and presenting the updated time sensitive information to the user (column 4, lines 24-39).

14. Regarding dependent claim 6, Nazem taught said step of reviewing includes initiating an SQL query of a time-sensitive information table, stored in the user profile,



using an SQL manager at the System Services layer to verify if the time-sensitive data is current (column 3, lines 29-34, 59-65);

said step of retrieving includes invoking the SQL manager to query time-sensitive information records for instructions to initiate an SQL-based data query and instructing the SQL manager to retrieve the updated time-sensitive information, and SQL manager initiating queries by establishing either of a TCP or UDP SQL port connection to an SQL at a ground station (column 4, lines 3-39); and

the step of presenting includes presenting the updated time-sensitive information to the user via the graphical user interface (column 5, lines 50-65).

15. Regarding dependent claim 7, Lundberg taught said user information is selected from a duty-free seller from catalog information displayed to the user, and enabling the user to provide credit card information to complete the purchase (column 5, lines 1-10)

16. Regarding dependent claim 8, Lundberg taught said user information is selected from the group consisting of information enabling the user to receive pre-selected catering services upon the moving object, information regarding connecting gates, user profile information, sports scores information, connecting gate information, airline reservation system information, messaging service information, internet services information, real-time information relating to moving object operation (column 5, lines 11-19), and user medical information.

17. Regarding dependent claim 9, Nazem taught said moving object operation information includes information relating to inventory carried by the moving object, including catering supplies (catering = entertainment, Figure 5A, column 5, lines 54-63).

18. Regarding dependent claim 10, Lundberg taught said moving object operation information includes email and said user information includes email directed to users (column 5, lines 11-19).

19. Regarding dependent claim 11, Nazem taught said moving object operation information includes either of engine performance data, baggage tracking information, ELS/Logbook system data, FOQA information, performance reporting relating to pilot actions, weather information (column 6, lines 56-59), or CDL information.

20. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg and Nazem as applied to claim 2 above, and further in view of Huang et al., USPN 6,292,835 B1 (hereafter referred to as Huang).

21. Regarding dependent claim 4, Lundberg taught the ground station is used as a proxy server for the data communication server and the TCP/IP services include file transferring (column 4, lines 25-34). Lundberg-Nazem does not specifically teach the file transferring occurring at an adjusted transfer rate in response to pervious measurements of the transfer rate in determining network performance. However, Huang taught file transferring occurring at an adjusted transfer rate in response to pervious measurements of the transfer rate in determining network performance (column 6, lines 25-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Huang's adjusting the transfer rate in the combined Lundberg-Nazem system for providing web access in a vehicle would have optimized resource consumption. The motivation would have been to request updates as frequently as possible without unnecessarily consuming system resources.

22. The language of claims 13-15 is substantially the same as previously rejected claims 3-11, above. Therefore, claims 13-15 are rejected on the same rationale as previously rejected claims 3-11, above.

### ***Conclusion***

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

24. Hiett, USPN 6,477,152 B1: taught an improved technique for retrieving data information various data sources while aboard a transportation vehicle; and

25. Hiett, USPN 6,795,408 B1: taught an improved technique for retrieving data information various data sources while aboard a transportation vehicle using a specified distribution network including a server/router.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrice Winder whose telephone number is 571-272-3935. The examiner can normally be reached on Monday-Friday, 10:30 am-7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571-272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Patrice Winder". The signature is written in a cursive style with a large, looping initial "P".

Patrice Winder  
Primary Examiner  
Art Unit 2145

February 21, 2006